Macropolicies to Help Re-start Economic Growth in Russia

Menshikov, Stanislav

Publication date:
1999

Document Version
Publisher's PDF, also known as Version of record

DEPARTMENT OF DEVELOPMENT AND PLANNING AALBORG UNIVERSITY

Macropolicies to Help Re-start Economic Growth in Russia

Stanislav Menshikov

DEVELOPMENT RESEARCH SERIES
RESEARCH CENTER ON DEVELOPMENT AND INTERNATIONAL RELATIONS (DIR)

WORKING PAPER NO. 76

Research Center on Development and International Relations (DIR)
Aalborg University
Denmark
Development Research Series
Working Paper No. 76

ISSN 0904-8154

Published by
DIR & Department of Development and Planning
Aalborg University

Distribution
Department of Development and Planning
Secretariat, room 36
Fibigerstraede 11
DK-9220 Aalborg East
Phone + 45 96 35 84 19
Fax + 45 98 15 65 41

Lay-out and wordprocessing
He He

Print
Uniprint and Centertrykkeriet, 2000

The Secretariat
Research Center on Development and International Relations
att: Secretary Marianne Hoegsbro
Fibigerstraede 2
Aalborg University
DK-9220 Aalborg East
Denmark

Tel. + 45 96 35 98 10
Fax. + 45 98 15 32 98

E-mail: hoegsbro@i4.auc.dk or jds@i4.auc.dk
Homepage: www.i4.auc.dk/development

MACROPOLICIES TO HELP RE-START ECONOMIC GROWTH IN RUSSIA[1]

Stanislav Menshikov[2]

Introduction

To re-start economic growth in Russia needs overcoming a long-time experience in the 1990s of depression and stagnation which accompanied transition from a centrally-planned economy to a system that in some, though not all ways is similar to a market economy. This period can be roughly broken up into three sub-periods:

1991-1995: a steep fall in both GDP and industrial production by about 50%;

1995-1997: stagnation around the low level reached at the trough;

1998-1999: new recession in output followed by a recovery to the 1997 levels in output.

Overcoming a long-time period of depression, stagnation and recurrent crises is much more difficult than resuming growth after a relatively short-lived downturn. It involves escaping from an extremely unfavourable behavioural pattern that is implanted in the economy and has created a "no-growth trap." Explaining this trap and possible ways of escaping from it is the first main subject of this paper.

Another major issue is how to promote growth without adding to price inflation. It would seem that an economy at its very low current level of capacity utilisation should be relatively free from inflationary pressures. And yet inflation tends to resume very quickly in response to shocks of various kinds adding to forces of depression and aborting prospects for growth. Therefore, the second main subject of this chapter is to explain the nature of the current Russian inflation and explore ways of reducing its pressures.

---

[1] Paper presented at DIR seminars "Alternative Paths of Transition," on November 17, 1999 and "The No-Growth Dilemma in Transition Economies," on November 24, 1999 at Research Center on Development and International Relations, Aalborg University.

[2] Professor Menshikov was Visiting Professor of Economics at Erasmus University Rotterdam in 1992-1996 and Visiting Professor at DIR, Aalborg University of Denmark in November 1999. He is Chief Research Associate, Central Institute of Mathematical Economics (CEMI), Moscow (on an international project commuting between Rotterdam and Moscow).

Macroeconomic policies can promote growth in different ways while also keeping inflation to a minimum. The tools available to such policies in a market economy are well known. It has been argued that such policies might not be applicable or effective in an economy that does not operate in a classical market way. Therefore the additional issue arises as to which tools of macroeconomic policy and in what way may be useful in helping re-start economic growth in such an economy? This is the third main subject of this paper.

To assist in this analysis the author has been using a macroeconomic model of the Russian economy which is based on:

- available National Account statistics for the period 1990-1998,
- input-output tables calculated for a number of years inside the same period,
- annual, quarterly and monthly indicators of economic and financial activity regularly published by Goskomstat, the Central Bank and other official and non-governmental bodies.

The model is described was used for three purposes:

- to reproduce (simulate) the dynamic picture of the economy in 1990-1998;
- to forecast the economic picture as it emerges in 1999 based on partial data available for the first half of that year;
- to simulate the effects of possible measures of macroeconomic policy supporting recovery in 1999 and leading to growth in 2000.

In the process some of its features were found that shed more light on the causes of the non-growth phenomenon, as well as on the factors affecting inflation. We shall discuss these subjects in the next two sections.

The No-Growth Trap

No satisfactory explanation of this phenomenon has so far been given. One general explanation is that Russia is not a real market economy, it is too corrupted and criminalised and that therefore Russian businesses do not react to market signals in the way they normally should. Further reforms to promote competition and create a true legal infrastructure are seen as the solution. But this is an institutional recipe which will take time to implement. Does it mean that growth is not possible even in today's imperfect environment? There are many instances of corrupt and otherwise imperfect market economies that have grown wonderfully fast for decades.

One previous explanation was that growth in Russia would resume automatically once annual inflation was reduced below 30%. That goal was

achieved in both 1996 and 1997 when CPI (the consumer price index) rose respectively by 21.8 and 11.0%, but there was a further reduction in output in 1996 and only marginal growth in 1997. With inflation in 1998 back at 84% and expected inflation in 1999 at least at 50% this explanation works against the possibility of resuming economic growth. But 1998 was a recession year while 1999 saw recovery and some growth.

A further explanation was that exorbitantly high interest rates which were caused in part by heavy borrowing by the government helped kill growth. This was probably true in 1996 when the prevailing real lending rates was close to 100%, but not any more in 1997 when they came down to around 30%. With real lending rates in 1998 and early 1999 in the negative range this argument against growth does not seem to work any more. There is no sign that banks are willing to lend more money to the real economy or that the latter is prepared to borrow more from the banks. This is despite the fact that there is a chronic excess of national savings over investment (see below) and (after the 1998 financial crisis) the absence of high-yield non-risk government securities in the financial markets.

A better explanation of the "non-growth trap" is that there is a structural anomaly in the composition of Russia's national income and product that is working against growth. On the income side, the share of wages and labour income in general in GDP is very low (compared to the industrial countries of the West) while the share of gross cash flow in the economy (i.e. depreciation plus profits plus other entrepreneurial income, called "mixed incomes" in Russian statistics) is excessively high.

While total labour income in Russia stays in the low area of only one third of GDP (compared with 60% in the US), net cash flow runs as high as 40% (compared to 17% in the US). While the domestic private market (household consumption and total capital investment) accounts for only 70% of total final sales in Russia's economy, it accounts for 85% of total final sales in the US. The domestic Russian market in the present conditions of aggregate demand is simply too small to buy even the relatively small amount of goods and services produced by the economy.

The Russian economy does export more than it can import, but the size of its net export balance is too small (4-7% of GDP) to take care of the difference. The enormous excess of business savings over investment cannot be fully covered by financial investment opportunities inside the country, either, and gives rise to large (partly illegal) capital exports abroad (amounting to as much as 5% of GDP on the expenditure side of the balance of payments).

Table 1 Share of Critical Components in Russia's GDP (% of total)

	1995	1996	1997	1998	1999
Income side:					
wages	25.4	26.2	25.8	28.5	25.5
total labour income	33.8	35.5	35.7	37.6	34.7
hidden income	10.1	11.4	11.2	10.6	9.0
total primary personal income	43.9	46.9	46.9	48.2	43.7
depreciation	14.5	15.0	16.6	23.1	25.0
profit	18.1	14.0	11.2	7.5	7.3
mixed incomes	11.7	11.4	11.5	7.8	10.0
gross cash flow	44.3	40.4	39.3	38.4	42.3
Product use side:					
personal consumption	49.0	49.1	49.0	56.5	52.0
gross fixed capital investment	20.2	20.5	20.3	19.3	20.0
inventory change	3.3	2.7	2.7	2.4	2.1
gross domestic capital investment	23.5	23.2	24.0	21.7	22.1
Difference between personal income and consumption	-5,1	-2.2	-2.1	-8.3	-8.3
Difference between net cash flow and gross capital investment	20.8	17.2	15.3	16.7	20.2

Source: Our calculations based on the Russian Macroeconomic Model

As will be shown later in this chapter, capital investment is a particularly weak element of the Russian economic picture. Its main limitation is not, however, the inadequacy of sources of financing. On the contrary, as seen above, gross cash flow (even after deducting the profit tax) is much larger than gross investment. The main reason for low capital investment is the uncertainty about the medium- and long-term prospects of the macroeconomy and the unwillingness to invest unless very high returns are guaranteed.

There seem to be two ways out of this dilemma:

(a) To close the savings-investment gap by centralising government control over the use of the national cash flow in order to channel it into capital investment and other national expenditure in the interests of sustainable long-term growth. This solution would necessitate substantial institutional change in the ways the Russian economy is managed today with a special accent on increasing the role of the federal government in promoting capital investment. In view of political circumstances, it might not be possible to pursue this route before the 2000 elections, and perhaps not even after.

(b) A less politically controversial way is to overcome the narrowness of the domestic market by macroeconomic policies aimed at substantially increasing aggregate demand. This can be done by combining three different ways:

- steadily increasing personal incomes and the purchasing power of the population;
- promoting increased demand for domestic capital investment goods and construction;
- increasing direct government purchases of domestic goods.

It has been argued that Russia's main economic problem today (apart from unfinished institutional reforms) is barriers to supply rather than inadequate demand. One important barrier cited by many businessmen and some economists is inadequate working capital (due to prevalence of barter and excessive cost of bank credit) that makes it next to impossible to increase production even if money demand is available. However, as demonstrated in the business recovery of early 1999, most industries had no trouble raising output once domestic goods became more competitive due to the strong devaluation of the ruble. Most supply bottlenecks at this juncture were created by inadequate transportation and other distribution infrastructure, particularly in oil and gas. Also, supply problems tend to emerge in the more highly monopolised industries where increasing money demand gives rise to higher prices rather than to higher production.

Therefore, the problem is to increase demand in such a way as to minimise inflation wherever possible.

Containing Inflation

Inflation in Russia has passed through different stages in the 90s, and it is not the purpose of this paper to trace the various forces that were driving it at every juncture in the last decade. We shall rather concentrate on the main factors that are continuing to feed inflation after the initial spurt of hyperinflation receded in 1996. We shall also look into the reasons for the short-lived resumption of

high inflation in the months immediately following the August 1998 financial crisis.

The model does not directly confront supply and demand in order to separate the demand-pull and supply-push forces that work to bring prices equilibrium in markets, it does makes it possible to measure the relative effect of rising demand on real product and on prices. When aggregate nominal demand is increased, GDP and its components also rise in nominal terms. This leads to an increase in money supply that is necessary to serve the circulation of goods and services. While a large part of that circulation (more than half of GDP) is effected on the basis of barter and money surrogates, a significant part which is directly related to household consumption and foreign trade is served by money, either cash or bank transfers. An increase in money supply feeds back by affecting prices: an increase in cash supply (M0) mostly affects consumer prices, and an increase in bank deposits mainly affects producer prices and, indirectly, the overall GDP price deflator. The extent to which prices rise as a result of the increase in money demand is determined by the response of supply of goods and services. This is captured in the model by deflating the nominal rise in output by the relative price index. The following table presents the results of a few scenarios in which nominal consumer demand was increased exogenously to simulate the effects of sudden increases in consumer buying which could be induced by various circumstances, including changes in the propensity to save and inflationary expectations (calculations refer to 1999).

These results clearly demonstrate the existence of a very strong inflationary bias in the Russian economy. The relatives shares of the supply and price responses are around 50-50 in the case of consumption (directly affected in this calculation) and are around 40-60 in favour of the GDP deflator even when consumer demand rises by a meagre 1.5%. When the rise in money demand is bigger (by 7.5 and 10.5%), the share of consumer price increase rises to 58% and to 70%.

An increase in government purchases respectively by 10 and 20% turns out to be less inflationary, presumably due to the much less rise of aggregate demand in absolute terms. But the share of price increase is around 50% in the case of a 10% increase in government purchases and around 55% when that increase is 20%.

Table 2 Effects of Growth in Consumer Demand on Real Consumption and Prices (1 - % change in variable; 2 - share of factor in total demand change, %)

Increase in nominal consumption (bln. rubles & %)	40 (1.5)		180 (7.5)		250 (10.5)	
	1	2	1	2	1	2
Nominal GDP	0.81	100	4.07	100	5.70	100
Real GDP	0.34	42	1.28	33	1.72	30
GDP deflator	0.47	58	2.76	67	3.91	70
Nominal consumption	1.51	100	7.55	100	10.57	100
Real consumption	0.80	53	3.25	44	4.35	42
Consumer price index	0.71	47	4.18	56	5.97	58

The conclusion to be drawn is that demand management should be used with care and, as a rule, limited to small increases in money demand in order to avoid excessive price rises but that one can count on utilise stimuli to aggregate demand for promoting real growth in the economy. A rough rule of a 50-50 division between real and inflationary growth could serve as a safe approximate guideline in most cases.

Our analysis of spurt of high inflation after the financial crisis of August 1998 is largely based on regressing the relevant variables for the period 1997-1999, using monthly data for prices, income, output, exchange rates and other available statistical series.

As expected, some correlation was found when the classical 3-month lag in the monetary base (or in M0 money supply) was used to explain changes in the consumer price index (CPI). However, the correlation was even better when no lag between the two variables was introduced. One reason is obviously that monetary authorities in Russia, despite claims to the contrary in some of the mass media, have been extremely passive or neutral vis-a-vis money supply, at least in the period under observation.

This author has always wondered why money variables were at all used to explain price changes when the real driving force on the demand side are

incomes, i.e. money flows, not money stock per se. Perhaps, when Milton Friedman first started his investigations, no reliable monthly income statistics were available. In Russia, monthly estimates of aggregate demand are available (both in terms of GDP and NCE - nominal consumption expenditure) and when used as explanatory variables instead of the monetary base or M0, yield results that are comparable or slightly better (on a monthly basis).

The ruble-dollar exchange rate is particularly important as an explanatory variable. In the period after August 1998 and April 1999, when the fall of the ruble versus the dollar stopped, most of the price rise was explained by the progressive devaluation of the ruble. Even then, prices have not increased in proportion to the rise in the dollar versus the ruble. Between July 1998 and April 1999 the CPI rose by 2.1 times while the dollar/ruble exchange rate increased by 4.1 times. The share of imported goods in those few months fell sharply (in real terms), particularly in consumer items. However, because in money terms the share of imports in retail trade remains high exchange rate dynamics remain a key factor in determining further price change. By managing to maintain the exchange rate stable between April and August 1999, the Central Bank contributed to reducing inflation to 2% or less per month.

Regression analysis fails to capture some important factors of money demand and therefore of money in circulation in Russia. The following table summarises some of these features in the crucial months that preceded and followed the August 1998 financial crisis.

Table 3 goes a long a way in demystifying money supply dynamics. M0 is simply cash holdings of households, businesses and institutions that are left unspent at the end or beginning of each period. Change in M0 is the balance of new money incomes and previous savings that have been spent during the period in question. In principle, M0 cannot grow more than by what is left over from current spending. The more is spent the less is left over and vice versa. It is a result of the movement of incomes and savings.

But in Russia, the flow of money incomes and savings, particularly non-labour incomes and savings are at times quite erratic. This is seen in the wide oscillations of the figures represented in the line "Other money movement (net)." If the figures for the pre-crisis July 1998 are to represent relative normalcy (which they do when compared to previous months), then it is evident that this line mainly stands for new non-labour incomes earned in the month concerned. Their sudden leap in August and particularly in September and October cannot be considered normal when compared to the largely stagnant wage bill in the same months. It is this leap in "other incomes and savings" that

financed the major rise in nominal consumption expenditure and helped intensify inflation in the same months. Where did this leap in incomes and savings come from?

Table 3 Key Factors in Money Supply (bln. rubles)

	07.98	08.98	09.98	10.98	11.98	12.98	01.99	02.99
M0 at beginning of month	129.8	129.3	133.4	154.2	166.4	167.3	187.8	178.0
Wage bill (due)	70.7	66.8	70.5	71.1	73.7	93.8	74.6	75.8
Change in household bank ruble deposits	-4.9	-14.5	-10.6	1.9	3.1	8.4	3.9	7.6
Household consumption expenditures	99.0	108.7	132.8	130.1	136.1	161.1	143.7	145.4
Other money movement (net)	22.9	31.5	72.5	73.1	66.4	96.2	63.2	80.0
M0 at end of month	129.3	133.4	154.2	166.4	167.3	187.8	178.0	180.8
Change in foreign currency deposits*	-6.1	-86.1	-83.8	-2.8	-11.7	-11.8	-10.8	1.8
Unexplained money movement (net) **	16.8	-54.6	-11.3	70.3	54.8	84.4	51.5	81.8

* Calculated as the ruble value of dollar changes in these deposits

** Calculated as difference between "Other money movement (net)" and "Change in foreign currency deposits."

It would be easy to blame it on government "money printing" were it not for the fact that the net increase of these incomes (counting 30 billion rubles as the normal starting monthly average) amounted to 213 billion rubles between August and January while the total federal budget deficit for the same months was only 78.6 billion, and less than half of it was financed by Central Bank credits. It is much easier to see the source of this "money printing" when changes in hard currency bank deposits are taken into account. These were in a continuous fall in dollar terms throughout the period until February 1999 and in the autumn months they certainly explained at least in part where the extra rubles came from. Unfortunately, no monthly series are available on individual and business non-bank cash holdings of dollars which are large and are another important source of sudden increases in ruble money supply. The large stock of cash and deposit dollars in Russia (comparable in size to the total stock of

rubles in circulation) is one reason why the government and the Central Bank are not fully in control of money supply.

We now come to the very essence of the inflationary surge in the months following August 1998. The main driving force was not money supply as such and not money demand per se, but rather the external shocks emanating from ruble devaluation towards the dollar. In the current crisis this was not one shock but a continuous series of shocks spread over the six months following August 1998. External devaluation led to a direct increase in prices of imported goods which are mainly bought by the well-to-do classes who spend part of their dollar holdings to supplement their current money incomes. This resulted in a further swelling of ruble cash in circulation and helped sell imported goods in the domestic market even though real wages and real demand of the wider strata of the population fell sharply.

We shall not go here into the details of how the ruble could be stabilised externally or, at least, kept from further drastic devaluation against the dollar. This would involve solving the intricacies of maintaining adequate hard currency reserves, reducing external debt payments, improving the balance of payments, exercising better control over outbound capital movements, ways of Central Bank intervention in the currency markets, etc.

There is, however, one serious dilemma. Keeping the exchange rate stable against the background of continuing domestic inflation (even at a low level) means losing some of the competitive advantages that Russian industry has gained due to drastic devaluation. To determine which exchange rate policy is correct means finding the break-even point between (a) increasing domestic production as a result of lower domestic inflation and higher real domestic demand; and (b) increasing domestic production as a result of successful import substitution due to maintaining the current wide differential between prices of imported and domestic goods.

Information coming from the Central Bank suggests that the effective parity in terms of goods and services entering Russian foreign trade (and allowing for a 10% profit margin) was around 19 rubles per dollar as of July 1999, implying that the ruble at its current exchange rate of 24.2 rubles was undervalued to the extent of 21.5%. At 2% monthly domestic inflation that would mean that ruble stability remained a political priority for at least another year, i.e. until summer 2000.

There is also the goods supply side of the inflation issue that is usually ignored in the theoretical and practical analysis. The financial crisis of August 1998

included a banking crisis that, via a temporary disintegration of the payments mechanism, led to a slump in physical production. The lowest point in industrial production was reached in September 1998 (when it was 14.5% below September 1997). The following recovery brought the monthly index (seasonably adjusted) up by more than 20% by mid-1999 thus fully wiping out the effects of the short-lived recession.

It is probably right to conclude that inflation would have been lower had the collapse in physical production not occurred. The shortage of consumer goods in August and September was real and contributed to the sharp rise in prices. Thereafter, when shortages disappeared, production was kept down by the newly depressed real demand. Our regression equations show that if the slump in industrial production had been avoided and physical output between July and December 1998 maintained at pre-crisis levels, consumer prices would have been lower in early 1999 by an average of 25 to 30 points (9-11%). Lower prices would have also meant higher consumer demand which was necessary to support increased physical output. Further growth in domestic production and the improvement in supply-demand conditions would be an important factor in keeping inflation at a low rate.

The overall conclusions insofar as containing inflation is concerned, are:

- monetary policy should aim for maintaining a stable ruble as the most important factor in minimising inflationary pressures; avoiding speculative activities in the currency market and policies to minimise capital leakages abroad are necessary tools of the general pro-growth policy;
- supporting growth in supply of domestic products and avoiding sudden disruptions of physical production is a necessary part of anti-inflation policies;
- import substitution, at least for the time being, seems to be an ant-inflation factor since it helps improve the external balance, support ruble stability and movement at this point in time, whether in consumer goods or in capital investment goods or in government consumption goods will act as an anti-inflationary factor.

In the debate around Russian inflation the issue of labour costs has not been an important one. Between 1992 and 1998 real GDP declined by 29.9% while employment fell by 11.8% indicating an average decrease in productivity of 20.5%. In the same period the average real monthly wage rate fell by 21.0% implying that unit labour costs had not changed since the early 90s. While wage rates vary widely between the various industries, direct wage in 1997 costs averaged only 12% of total costs of manufacturing and mining and 16.6%, if

social taxes were included. The total direct wage bill for the 23 industries represented in the 1995 input-output table was only 9.8% of their combined gross outputs, and 13.2% if social taxes are included. Because of these low levels unit labour costs have not been seen as a factor producing inflationary pressures in the economy.

As a result of the 1998 financial crisis, the importance of wage costs has further diminished.

Table 4 Comparing Wages and Industrial Output (indices, 1997 = 100)

	01.98	07.98	08.98	09.98	10.98	11.98
Real wage rate	104.4	106.0	98.6	73.3	72.2	72.5
Industrial production	100.5	90.9	88.1	85.2	89.3	92.2
Ratio of wage to output	103.9	116.6	112.0	86.1	80.8	78.6
	12.98	**01.99**	**02.99**	**03.99**	**04.99**	**05.99**
Real wage rate	69.2	62.7	63.1	66.4	67.7	66.9
Industrial production	95.3	95.5	97.5	101.6	102.4	102.5
Ratio of wage to output	72.7	65.7	64.7	65.4	66.1	65.3

Before the August crisis real wages were rising somewhat faster than industrial production and that the ratio between the two was increasing which indicated a trend towards higher unit labour costs. However, after August 1998 there was a sharp break in this pattern. The real wage rate fell much deeper than industrial production and its fall continued long after production started recovering. As a result, the ratio between the two has fallen to only around 60% of the pre-crisis level. Much lower unit labour costs could be one of the factors helping recovering in output because they imply higher profit margins.

The conclusion is that at the present there is no discernible inflationary wage pressure. In fact, there is some leeway for wages to rise before they might become a factor feeding inflation. It also follows that somewhat higher wages at this juncture might become a factor stimulating aggregate demand and thus supporting a further rise in output.

Factors of Recovery in 1999

By mid-1999 industrial production reached a level that was 6.1% higher than in mid-1998. Even if output in industry rose no further and retained its mid-year

level, the total annual rise in 1999 over 1998 would be 7.3%, a record-breaking figure for the decade. Even though this would only be a return to the 1995 level which was still much lower than the pre-reform peak, it would be considered a significant accomplishment.

In terms of real GDP the annual level of 1998 was achieved already in the first quarter of 1999. Assuming some further growth in the remainder of the year, an annual growth of 2 or 3 % over 1998 was now indeed possible given that recovery was not aborted and that there was no new serious crisis in the real and finance sectors.

This situation was reflected in the **basic 1999 scenario** computed by the Russian Macroeconomic Model. Its main features together with a comparison with 1998 are shown in Table 5.

The overall increase in 1999 was mainly in nominal terms. Personal consumption expenditures led accounting for 64.3% of the total rise in final spending, followed by exports (63.8%), leaving investment (19.2%) and government purchases (5.7%) far behind. After excluding the substantial rise in nominal imports, the contribution by net exports was an enormous 14.7% of the rise in nominal GDP, nearly 3 times larger than the share of net exports in 1998 GDP.

Most of this money demand drive went into higher prices which in terms of the GDP deflator rose by 47.3%. However, due largely to the relatively early stabilisation of the ruble versus the dollar, inflation was lower than initially expected by a full 10 percentage points on an annual basis when measured by the GDP deflator and by 17 percentage points if measured by the consumer price index. Lower inflation was the main factor responsible for producing a small annual rise in real GDP instead of the initially forecast 5% fall.

Data in constant prices give a somewhat different perspective on the structure of the 1999 recovery. When measured in real terms, household consumption fell by 8% compared to 1998 and therefore did not contribute to real growth of GDP on an annual basis though it did come back from the initially projected more severe 27% downturn. Exports also decreased in real terms by close to 10%. The real increase in capital investment was too small to compensate for these losses in real aggregate demand. The principal contributor to real growth was the significant fall in imports leading to a substantial rise in real net exports. This factor alone was large enough to overcome the combined reduction in real household consumption and exports:

change in imports	-132.7 bln.	1995 rubles
change in consumption	-55.7	"
change in exports	-32.8	"
change in investment	+10.4	"
change in GDP	+17.0	"

Table 5 Basic Macroeconomic Projection for 1999 (billion rubles)

	1998	1999	change bln. ru	change %
GDP, current prices	2684.5	3999.7	1315.2	49.0
GDP, constant 1995 prices	1475.5	1492.5	17.0	1.1
GDP deflator (1995 = 100)	181.9	268.0		47.3
Industrial production (1997=100)	94.8	100.1		5.6
Household consumption, nominal	1532.2	2396.3	864.1	56.4
HC, constant 1995 prices	715.8	660.1	-55.7	-7.8
CPI deflator (1995 = 100)	214.1	363.0		69.6
CPI, December to December (Dec 1995 = 100)	249.3	373.1		49.7
Government consumption, nomin.	467.8	542.9	75.1	16.1
Gross fixed investment, nominal	468.4	720.8	252.4	53.9
GFI, constant 1995 prices	253.2	263.6	10.4	4.1
GFI deflator (1995 = 100)	185.0	273.4		47.8
Exports, nominal	736.4	1575.0	838.6	113.9
Exports (1995 prices)	337.1	304.3	-32.8	-9.7
Imports , nominal	593.2	1235.9	642.7	108.3
Imports (1995 prices)	270.5	137.8	-132.7	-49.0
Net exports, nominal	143.2	339.1	195.8	136.8
Net exports (1995 prices)	66.6	166.5	69.9	150.0
Money supply - M0 (end of year)	187.8	287.0	99.2	52.8
Money supply - M2 (end of year)	452.5	666.0	213.5	47.2

It is correct then to conclude that the fall in real imports was the largest single factor contributing to the recovery in real GDP. How much of this was a purely statistical phenomenon produced by increasing net exports and how much was due to genuine import substitution, i.e. increasing production of domestic goods in lieu of imported ones?

Import Substitution and Export Expansion

Let us return to the real parity of the ruble versus the dollar as estimated by the Central Bank of Russia as of mid-1999 at 19 rubles per dollar. Taking the Russian producer index (as a rough indicator of domestic prices used for that calculation) which rose in July 1999 by 1.61 over July 1998, then parity in mid-1998, i.e. on the eve of the August devaluation, could be assumed to average 11.8 rubles to the dollar. The price parity measured in consumer items was then estimated roughly at 9 rubles per dollar (this was the lower limit to which the Kiriyenko government had initially intended to reduce the official exchange rate). At the current exchange rate of 6.27 the ruble was very strongly overvalued on both counts. In the next few months the ruble depreciated both domestically and internationally as shown in Table 6 but much more externally.

Table 6 Domestic and External Depreciation of the Ruble

	07.98	08.98	09.98	10.98	11.98	12.98
Producer price index (PPI)	1.00	0.988	1.061	1.123	1.179	1.236
Consumer price index (CPI)	1.00	1.037	1.436	1.500	1.586	1.770
External producer parity (R/$)	11.8	11.7	12.5	13.3	13.9	14.6
External consumer parity (R/$)	9.0	9.3	12.9	13.5	14.3	15.9
Market exchange rate (R/$)	6.27	10.36	16.05	16.60	18.47	21.14
Producer parity/exchange rate	1.88	1.13	0.78	0.80	0.75	0.69
Consumer parity/exchange rate	1.44	0.89	0.80	0.81	0.77	0.75

	01.99	02.99	03.99	04.99	05.99	06.99
Producer price index (PPI)	1.320	1.393	1.446	1.498	1.549	1.581
Consumer price index (CPI)	1.918	1.997	2.053	2.115	2.162	2.203
External producer parity (R/$)	15.6	16.4	17.1	17.7	18.3	18.7
External consumer parity (R/$)	17.3	18.0	18.5	19.0	19.5	19.8
Market exchange rate (R/$)	23.10	23.10	24.86	24.29	24.70	24.21
Producer parity/exchange rate	0.68	0,71	0.69	0.73	0.74	0.77
Consumer parity/exchange rate	0.75	0.78	0.74	0.78	0.79	0.82

The big change came in August 1998 in the consumer market and in September 1998 in the wholesale market when the ruble was undervalued by 20%. It fell even lower towards the end of 1998 but largely recovered by mid-1999. However, the remaining difference is still nearly as large as it had been in the fall of 1998. Thus, Russian-made products suddenly became competitive, both in foreign markets and inside Russia, and by a wide margin. The reaction of falling imports was immediate while exports took longer to start recovering.

Simulation on the RMM shows a significant positive reaction of the economy as a whole to lower imports. As explained above, the model treats imports as dependent on industry gross outputs. This means that import coefficients are really shares of imports in total demand for products of the industry in question. When import coefficients are reduced (meaning less competition from abroad) profit margins of domestic industries increase inducing them to produce more. At the same time, internal demand is increased through the multiplier effect of larger net exports.

In one of our simulations, import dependence was reduced by 10% for all industries across the board. This led to a decrease in imports by 123.6 bln rubles in current prices, but also to a rise in household consumer sales by 82.1 bln. rubles and in higher demand for domestic investment goods by 23 bln rubles. All told, the gross addition to aggregate demand was 228.7 bln. rubles, or 5.7% of nominal GDP. This example shows that domestic buyers ended up buying about 85% as much more Russian-made goods than were squeezed out of the Russian market by the more competitive price set-up. This fact can be explained by the phenomenon of lower domestic product prices which induce domestic consumers and firms to buy more locally by spending more out of their savings.

Even though more expensive imported goods are substituted by cheaper domestic goods both producer and consumer prices tend to grow due to higher demand. But prices tend to lag behind demand (as shown above) so that less import dependence leads to larger real GDP by 2.7% in our example. Only half of this rise due to the statistical effect of smaller imports and another half is the result of higher domestic demand and output.

Import substitution in 1999 was particularly strong in consumer goods where import dependence prior to the 1998 crisis tended to be higher than in other industries. This was particularly true of the light industry which produces most of consumer durables except food and where 55% of total sales had been import-generated, as well as in food processing (24%) and machinery (which accounts for most of consumer durables) - 28%. In early 1999 leaders in import reduction were foodstuffs, cigarettes, alcohol. clothing, footwear and

machinery. The following table summarises the results of model simulations when import dependence coefficients were lowered by 50% in light industry, and by 30% in food processing and machinery.

Radical reductions in light industry and machinery are particularly important in macroeconomic terms. The effects in each of them are approximately equal to the overall reduction in import dependence by 10%. The multiplier effect is practically the same for each of the three industries, but is slightly smaller than in the case of overall reduction - 2.07.

Table 7 Import substitution in three most import dependent industries
(bln. rubles, unless otherwise indicated)

	Light industry	Food processing	Machinery
Change in imports	- 117.4	- 74.8	- 108.7
Change in GDP	+ 227.2	+ 144.8	+ 210.5
Change in domestic demand	+ 109.8	+ 70.0	+ 101.8
Change in real GDP (%)	+ 3.0	+ 2.0	+ 2.8
Multiplier effect (ΔGDP/ΔIM)	- 1.94	- 1.94	- 1.94

While the effect of rise in competitive pricing was slower to materialise in exports, the latter did start a strong recovery in early 1999. Leaders in the process (in terms of volume) were ferrous and non-ferrous metals, wood processing and chemicals (particularly fertilisers). These industries, together with food and textiles (which favoured more from import substitution) were also leaders in the recovery of Russian manufacturing.

Export growth is therefore an important factor in sustaining further economic recovery in Russia. Industries that account for most of the country's exports include oil and gas, ferrous and non-ferrous metals, chemicals, and machinery. The combined share of these five sectors normally accounts for 82% or more of total export. Model simulations showing macroeconomic effects of export expansion by 10% in value of each of them and together is presented in the following table.

Because oil and gas are the largest export item, growth in real GDP induced by their 10% expansion is the largest - 2.3%. But this is the sector where export

expansion is limited by inadequate capital investment in exploration, drilling. production and transportation. In 1999 their exports were increased in value due to a strong rise in world prices, but not in volume. It was also the industry with the smallest exports/GDP multiplier - 1.3 compared to the overall export multiplier of 1.62 for the five major exporting industries. No wonder since oil and gas are relatively small buyers of other industries' products.

Table 8 Macroeconomic effects of export expansion by 10%
(in bln. rubles, unless otherwise stated)
1 - oil & gas, 2. - ferrous metals, 3 - non-ferrous metals, 4- chemicals, 5 - machinery, 6 - five industries, combined

	1	2	3	4	5	6
Change in:						
Nominal GDP	183.2	42.8	59.6	27.9	28.2	341.7
Exports	141.2	25.7	37.1	16.8	15.3	210.8
Imports	82.2	13.2	18.4	8.6	8.7	105.6
Net exports	59.0	12.5	18.7	8.2	6.8	105.2
Domestic demand	124.2	30.3	40.9	19.7	21.4	236.5
Real GDP (%)	2.3	0.6	0.8	0.4	0.4	4.2
Multiplier (ΔGDP/ΔEXP)	1.30	1.67	1.61	1.66	1.84	1.62

Machinery which has so far not been the leader in exports could be the most effective export industry in macroeconomic terms since it enjoys the highest export multiplier of the five leaders - 1.84 This is probably true in the long-term aspect since its immediate effect on real GDP growth is on the lower side. Ferrous and non-ferrous metals lead in short-term effect on real growth.

Export prospects could be more important for sustaining economic growth beyond 1999 and in the longer term because import substitution might have a shorter-run stimulatory effect limited to the particular economic conditions of 1999. In that year imports are estimated to fall by about 50% in dollar terms. A further reduction of that magnitude in absolute terms is not in the cards since it should bring imports down to zero. Even a relative reduction of that size implying an overall fall of 75% from the 1998 level is hardly possible. However, even further smaller reductions in important dependence could be important.

Continuing import substitution in 2000 and beyond will largely depend on whether domestic prices rise in line with the dollar/ruble exchange rate. If producer prices rise faster there will be more "counter-substitution." For instance, a possible rise in the parity from an average 0.8 in 1999 to 1.0 in 2000 would lead to an estimated addition of $3.5 billion in merchandise imports, or roughly 5% on top of larger imports due to growth in real GDP.

Estimating the effect of relative price and exchange rate changes on exports is a more complicated matter. For one, around 40% of total Russian merchandise exports are accounted for by oil, petroleum refinery products and natural gas. Exports of these items are not determined by the competitive price mechanism. These volumes largely depend on output and transportation infrastructure, as well as policy decisions resulting from attempted co-ordination with OPEC. Thus, in spring 1999 Russia agreed to limit its oil exports in order to help increase world oil prices. Other exports are mostly in intermediate products, such as ferrous and non-ferrous metals, chemicals, wood and pulp. Competitive pricing in these markets is important and has been a major factor in the 1999 recovery.

Government expenditure and tax policies.

Government fiscal policies in Russia have been among the most controversial economic issues, both in theory and practice. The largely prevailing monetarist view is that reducing the government budget deficit should be a priority for at least two reasons: (a) it is anti-inflationary and therefore pro-growth in the long run; and (b) it should free additional financial resources for capital investment expansion (the "anti-crowding-out effect"). Most of the advice and conditions accompanying IMF loans follows along these lines and is responsible for the prevailing restrictive budgetary and monetary policies.

The opposite view shared by many in the academic and business community as well as by part of the political opposition is that in a recession atmosphere when there is a large under-utilised capacity problem in the economy, budget deficits tend to stimulate growth, rather than to stifle it since additional fixed capital can be easily brought into use without large new capital investment. At the same time any reduction of the budget deficit, whether by raising taxes or cuts in government spending, has the effect of reducing aggregate demand and leads to further stagnation or fall in output. In fact, such policies open up a vicious circle since less output means lower income, less budget revenue and persistence of the budget deficit problem.

Most of this controversy has dominated the discussion between Russia and the IMF in the course of talks about the resumption of Fund financing which finally

led in July 1999 to a decision to grant a new credit of $4.5 billion. To convince the Fund to take that decision, the present government agreed to maintain a primary budget surplus equal to 2% of GDP, delay a reduction in the value-added tax rates from 20 to 15% (already approved by the Russian parliament but postponed until at least 2000 by the government) and increase excise taxes on gasoline.

To check out macroeconomic effects of these measures, we have run a number of scenarios in which appropriate changes were introduced in our base scenario for 1999. The first case is that in which the overall budget deficit for the year (including interest payments on accumulated government debt) is eliminated by cutting government purchases of goods and services. In our base scenario this would be equivalent to cutting government purchases by 41.5 billion rubles (in current prices) from a projected total of 542.9 billion rubles to 501.4 billion, or by 7.6%.

The immediate effect (all other conditions being equal) is a reduction of nominal GDP by 76.4 billion rubles, or by 1.9%. The direct negative effect on GDP is the cut in government purchases themselves, but the additional effect is the reduction of personal consumption by 28.5 billion (1.2%), fixed capital investment by 20.6 billion (2.9%) and total domestic aggregate demand by 90.6 billion. The domestic demand/government purchases multiplier is 2.18 which is reduced to and 1.84 after deducting the import leakage of 14.2 billion. The government purchase multiplier is thus shown to be a powerful policy instrument with wide ranging macroeconomic effects. This is true even after lower prices (due to smaller aggregate demand) are factored in leaving a reduction in real GDP of 0.8% and smaller real household consumption of 0.6%.

Another indirect effect, of course, is the reduction in government revenue by 17.6 billion which means that the reduction in the budget deficit is only 23.9 billion, not 41.5 billion, as initially expected. The budget remains unbalanced due to a reduction in both personal and business income. To achieve a budget balance, a much larger reduction in government expenditure would be needed, namely 73.0 billion rubles, bringing government purchases down by 13.4% instead of the initially planned 7.6% or nearly by twice as much. Were this larger cut actually carried out, the total reduction in nominal GDP would have been 3.4%, and a 1,5% cut in real national product. This would totally eliminate any real growth in 1999.

A similar negative effect on GDP is produced by raising excise taxes, as insisted upon by the IMF. In our simulation, we provided for a threefold rise in

the excise tax for gasoline by increasing the excise tax coefficient derived from the relevant column of the input-output table. The expected addition to government revenue is 36.0 billion rubles which could practically wipe out the overall budget deficit if macroeconomic effects were not taken into account.

However, higher gasoline prices resulting from the excise tax increase would tend to reduce real household expenditure and result in lower GDP. The overall effect depends on the price elasticity of consumer demand. Assuming an elasticity of 1.0 the excise tax increase would reduce nominal GDP by 1.75% and real GDP by 0.6%. The reduction in real household consumption would be substantially larger - 1.9%. And because of a reduction in overall business activity the net addition to the government budget would be only 17.3 billion rubles, twice less than expected when macroeconomic effects are not counted.

This is because a reduction in personal consumption (due to higher prices and lower purchasing power) and in nominal GDP would reduce incomes and tax collection in all items, except the "excised" products. Indirect taxes are a direct deduction out of value added and therefore a disproportionate reduction in profits, given unchanged wage rates. Our calculations show that the budget deficit would be eliminated only if excise tax rates were raised twice as much (or by 80% on the average for all taxed products) and only at the price of reducing GDP by 3.5% compared to the base scenario. Lower profits would also help build up additional inflationary pressures on the supply side. This is not a politically desirable scenario, particularly in an election year.

An opposite and positive macroeconomic effect could be produced by the delayed overall reduction of the value-added tax (VAT) from 25 to 20%. The usual line of reasoning against reducing VAT is that (a) it is difficult to avoid and easy to collect; and (b) it constitutes a large part of government revenue. Both points are true. But collecting VAT is also subject to fluctuations. For instance, VAT accounted for 25.7% of total government revenue in 1997, but only 23.8% in 1998. The latter fall was caused by the post-August recession in output and sales. Easiness to collect VAT is explained by the fact that it is automatically deducted from companies' sales. But even then VAT arrears to the budget tend to be large if companies are not paid on time by their customers. In this sense there is no great difference between VAT and other Russian taxes.

But the case for VAT reduction is very strong in view of its macroeconomic benefits. In technical terms, strictly speaking VAT is paid as an addition to the company sales price, not from value-added as its name seems to indicate. The value-added nature of the tax is important only *post factum* when the company is able to claim a refund for the VAT it had paid to its suppliers. But the final

consumer pays the full VAT rate on the sales price and cannot normally claim a refund.

Therefore, reducing the VAT rate from 20 to 15% would provide the consumer with a chance of getting some, if not a full discount from the sales prices or would have, at least, the effect of reducing the inflationary cost pressure on producers and consumers. These considerations make it possible to simulate macroeconomic effects of changes in VAT in our model.

In order to be able to simulate VAT rate changes we have to:

(i) estimate the actual size of the proposed reduction. This, in accordance with the initial decision, was from 20 to 15%, i.e. a reduction of VAT rates by 25%. A reduction of VAT rates in the model by that amount would automatically increase profit margins which are calculated as a remainder net of all costs (including indirect taxes on products) assuming no change in sales prices;

(ii) decide on the relative effect reduction in VAT would have on sales prices. If producers reduce them to the full extent of the VAT rate reduction, then the value of total output would fall by the same amount and profit margins in absolute terms would remain unchanged. In this case the total reduction in the value of products would add to the benefit of the consumers whose real purchasing power would be raised accordingly. If, however, producers were to keep, say, half of the VAT rate reductions to themselves, then they would benefit to the extent of half of the profit margin, while the consumers would get half of their share in increased purchasing power.

In our simulation we used this 50% assumption, which is reasonably reflecting Russian conditions, as well as a more optimistic assumption of 75% in favour of the consumer, and 25%. in favour of the producer. It is true that unlike the practice widespread in West European countries where VAT is added explicitly to the seller's price for buyers to see, sale prices in Russia in many cases in most retail markets are not explicitly demonstrated as including or excluding VAT. This makes it possible to hide from the consumer the fact that sellers might be keeping to themselves a reduction in VAT rates. Eliminating this corrupt practice of cheating on the consumer is easier said than done in the Russian market environment.

However, the sheer force of competitive pressures will still work towards a de facto lessening in price pressures as a result of VAT rate reductions, particularly when domestic producers are suddenly induced by favourable demand conditions arising out of ruble devaluation. Also, in inter-firm relations hiding VAT reductions is not that easy. The actual share of the benefits passed on to

consumers is something that can be established only a posterior. But in our projections we can make reasonable a priori assumptions as to what would most likely happen in various scenarios.

Table 9 Effects of a 25% Reduction in the Value-Added Tax

	0.5 share to the consumer		0.75 share to the consumer	
	bln. ru	%	bln. ru	%
GDP, nominal	+ 86.4	+ 2.2	+ 166.6	+ 4.2
GDP, real		+ 1.6		+ 2.7
Personal consumption, nominal	+ 70.3	+ 2.9	+ 202.4	+ 5.3
Same, real		+ 2.6		+ 4.3
Government revenue, total	- 21.1		- 2.3	
incl. VAT	- 48.1		- 48.8	
profit tax	+ 13.9		+ 21.0	
household income tax	+ 3.2		+ 6.2	
excise taxes	+ 2.9		+ 5.7	
other taxes	+ 7.0		+ 12.0	
After tax profit	+ 17.9		+ 26.5	

If the producers pass on to consumers in relatively lower price most of the VAT reductions, they would still benefit from an increase of 26.5 billion rubles in after tax profits. The total loss of revenue to government would be practically nominal. This is the result of growth in consumer purchasing power which builds up aggregate demand for consumer goods. Larger profits could also lead to bigger capital investment. But personal consumption would still be leading bringing its share in GDP to 60.5%, a record high for the post-reform period.

This is a promising scenario for various reasons: (1) there is a widespread public consensus in favour of lower VAT; (2) this is more of a fair deal for both the producer and consumer (including the wage earner) since it results in both higher real incomes and larger profits; (3) it opens up the road to economic normalcy by maintaining a primary budget surplus at its base level; (4) it helps avoid unpopular rises in excise taxes.

The main result is that VAT reduction could help trigger off growth in real product at the appealing annual rate of 2-3%. This has not materialised in 1999 due to excessive restrictiveness in fiscal policies, but could become a substantial way to maintain or accelerate growth in 2000. Such a departure would probably need a change in government and forfeiting monetarist policies supported by the IMF.

2000 and Beyond

There are three possible approaches to projecting short-term developments in the Russian economy. One, which could be called the "**Finance Ministry approach,**" simulates the mentality of government economists who start with an estimate of next year's federal budget. This has to be combined with some vision of what expected growth and inflation are likely to be. For instance, in mid-1999 the cabinet was expecting real GDP growth in 2000 of 1.5%, average inflation at 18-20% and a rouble/dollar exchange rate of 32. These were the guidelines against which the federal budget for 2000 was being drafted in time for its approval some time at the turn of the year. Once most of the details of the budget were worked out via the long compromise between the government and parliament, the budget would become the basic exogenous foundation for the performance of the economy because federal spending, accounting for anywhere between 16 and 22% of national final expenditure in money terms, would be the largest single component of that aggregate and decisively affecting the latter.

If we proceed along these lines, growth in nominal GDP in 2000 should be around 20,7% resulting in a gross domestic product figure of 4830 billion rubles. We could then use our model to check whether this was at all possible and what would all other components of the economic picture be for that projection to be borne out.

Another approach, which could be called the **"hopeful optimist approach."** proceeds from the assumption that for some reason the Russian Ministry of Finance is too cautious in both its assessment for 1999 and particularly growth in 2000. Why not look into the possibility of achieving real growth of 3% with the same inflation figure of 20%? The model is used to see whether this is at all possible.

Yet another approach, which might be called the **"inertia approach,"** would proceed from the assumption that, whatever budget plans the federal government works out, the movement of the economy would be predetermined by the continuation of the basic trends that were in operation in the Russian economy in the last few years and which would not be liable to change very

much in the course of one year. In this approach, the federal government would be simply one of the players and not necessarily the decisive one. The overall aggregates would be the outcome of the endogenous interplay of the whole multity of decisions made by the consumers, producers, investors, exporters and importers, as well as the numerous separate government agencies and local authorities. The outcome of these decisions would be influenced by federal policies, but largely determined by the interaction of market forces working, in the main, independently of the federal government.

We have tried all three approaches and will present their results, starting with the "hopeful optimist approach," followed by the "Finance Ministry approach" and finally the "inertia approach." A comparison of the results is important in learning more about how the Russian economy operates.

Note that in projections for 2000 we also include simulation results for industrial production, both nominal and real. This helps give a better perspective on developments in the economy, including a sectional approach if necessary.

The Hopeful Optimist

An attempt is made to achieve 3% real growth in both real GDP and real household consumption while keeping inflation down to 25%. In the consumption price index and to 20% in the GDP deflator. This yields nominal growth by 23.6% in GDP and 28.8% in household consumption. Capital investment is estimated to rise only modestly in nominal terms by 22.5% and 2% in real growth. Roughly the same assumption is made for government purchases. No real growth is assumed for exports while net exports are to remain constant at 340 billion rubles. It is essentially a household consumption growth scenario were the accent is on the consumer and its revival from the trough of the 1998 crisis. No attempt is made to stimulate growth by active fiscal and monetary policies. The exchange rate is permitted to rise by 20%, more or less in line with domestic inflation. The primary budget surplus is to be kept at 1.5% of GDP which implies neither restrictive, nor expansionary policies. The hope is simply that a reduction in the share of government purchases in GDP (to only 13.3% as compared to 21.8% in 1997) would free additional resources that would first lead to higher consumption and later, hopefully, also to higher investment. It is therefore also a very liberal scenario.

The model does not support this optimism. While the target of GDP is achieved in nominal terms, overall inflation overshoots the GDP deflator guideline by 4.6 points, leading to a reduction in real GDP by 0.9%. Results in personal consumption are more satisfactory. Inflation in CPI is close to the officially

projected 25% rise permitting a 2.7% increase in real consumption. This is made possible by an increase of the share of wages in total personal money income from 43.5% in 1999 to 45% in 2000. Most of this increase is due to assumed rising employment rather than higher wage rates. It is a return to the 1997 share of wages but is still down from the high 49.7% in 1998. Because inflation is higher than expected, both capital investment and government purchases are down in real terms.

An attempt to stimulate growth based almost exclusively on consumption is clearly not a realistic perspective if it is not supported by real growth in investment, government purchases and exports.

A logical conclusion from the government viewpoint would be that inflation would have to be kept in check perhaps by additional measures to prevent a 20% fall in the exchange rate and keep it at around 30 rubles by the end of the year. This is not an improbable scenario if the Central Bank continues its restrictive towards speculation in currency markets. The model shows that were this to happen, domestic inflation would subside to 19% in the CPI and 21% in the GDP deflator permitting a real rise of 1.9% in GDP, 8,6% in personal consumption and 2.4% in industrial production (there was no growth in this indicator in the first simulation). However, this does not take into account possible losses in exports and higher imports due to less competitive prices.

An alternative approach is to permit the exchange rate to fall and thus to promote exports and stimulate capital investment rather than personal consumption. For instance, a delay in restoring wages to their pre-1998 level would lead to higher profits and more capital investment. While real consumption would still grow twice as fast as initially expected (by 6 instead of 3%) the rise in real investment (by 5.9%) would be more than enough to compensate for losses in consumption growth and result in modest real growth in GDP (by 0.2%) and industrial production (by 0.4%).

A larger nominal GDP also means higher government revenues and lower total budget deficit. In our scenario the primary surplus increases by 29 billion rubles, which should permit an additional increase in government purchases by roughly the same amount. This is a relatively small increase of only 4.7% compared with the original "hopeful optimist" scenario but it permits some additional real growth in both production and investment. Because government revenue also rises there is a possibility to increase government purchases even further. This permits real growth in GDP to reach 1.4% without upsetting the budget. At this point the cut in VAT rates is a powerful additional stimulus

which raises real growth in GDP to 3.3%. The main points of this final "hopeful optimist" scenario are described in Table 11.

Table 10 The "Hopeful Optimist" Scenarios, 2000
(billion rubles, unless otherwise indicated)

	Initial	Final	Difference
Nominal GDP	4943.5	5284.1	+ 6.9%
Real GDP (growth over 1999)	- 0.2%	3.3%	+ 3.5%
GDP deflator	24.7%	27.8%	+ 3.1
Nominal consumption	3085.0	3272.1	+ 6.1%
Real consumption growth	2.7%	10.4%	+ 7.7%
CPI deflator	25.4%	23.7%	- 1.7
Fixed capital investment	882.0	1074.5	+ 21.8%
Government purchases	660.0	721.2	+ 9.3%
Net exports	340.0	239.9	- 24.9%
Government revenue	1171.0	1129.2	+ 3.6%
Government expenditure	1055.0	1115.1	+ 5.9%
Primary government surplus	74.2	55.9	- 24.7%
Value added tax rate	20%	15%	- 25.0%
Money supply (end of year):			
M0	364.3	360.9	- 0.9%
M2	825.0	862.6	+ 4.6%

Another interesting thing about this scenario is that inflation rates are higher than initially projected and not too different from the first attempt to achieve 3% real growth. But while the initial attempt fails to achieve its main objective, the final scenario does. The explanation is that strong growth in household consumption is supported by activist macroeconomic policies which lead to higher investment and government purchases. Unlike the 1999 recovery, neither import substitution or export expansion play any significant role, and real growth is achieved exclusively on the basis of domestic generated demand.

The Finance Ministry Approach

This approach assumes real GDP growth of 1.5% resulting from some 21% increase in nominal GDP and a 19.5% average annual inflation. As in initial the

"hopeful optimist" scenario the government takes a non-activist position relying on spontaneous growth in consumption and achieving a primary budget surplus of about 2%. Its main instrument in containing inflation is restrictive monetary policy and keeping the exchange rate in line.

A first simulation of this policy achieves disappointing. Because overall inflation overshoots the target (the GDP deflator rises by 22.1% instead of 19.5%, real growth is sabotage and is in fact negative (-0.8%). Real growth in household consumption by 4.1% helps raise industrial production by 0.2% but this is widely off mark. Growth in real consumption is explained by success in restraining further external devaluation of the ruble (at the year-end) the exchange rate is only 33.7 rubles to the dollar. This policy affects the CPI more than it does the GDP deflator because consumer goods are more directly influenced by imports.

The general picture is only marginally changed, if more reliance is put on weak promotion of capital investment at the expense of consumption. Capital investment rise by 32% in nominal terms and by 8% in real terms. After its deep fall in previous years this is not adequate to trigger overall growth.

However, in this scenario there is a definite improvement in the primary budgetary surplus and the practical wiping out of the total budget deficit. If the government simply sits on that saving and uses it to pay off its creditors, the effect on real growth would be at best zero. If, however, it uses the 25 billion addition in government revenue to raise government purchases by the same amount, the domestic economy would feel the beneficial effect immediately. Because this scenario brings an additional 14 billion in government revenue, its purchases can rise even further without reducing the initially planned primary surplus. The overall possible increase consistent with such a limit is 50 billion rubles, an increase of only 7.6% over the initial projection. But it results in 1.1% growth in real GDP which is now close to the original Finance Ministry of finance goal. It could be closer but inflation rises in line with aggregate demand biting off some of its real effects. Some small additional incentives in tax rate reduction should be adequate to reach the final goal.

The conclusion is that the Finance Ministry scenario is achievable but with some stimulatory effort on the part of the government. The main lesson is to use the expected increase in the primary budget surplus for increasing government buying of domestic goods and services rather than for paying off its creditors. The latter task could wait until endogenous growth brings Russia adequate government revenues.

How Strong is Growth Inertia?

As we mentioned at the beginning of this chapter the Russian economy is stuck in a "stagnation trap." Our starting proposition was that apart from forces feeding inflation there was the basic problem of inadequate aggregate demand caused mainly by low incomes of the majority of Russia's population and the lack of incentives for capital investment a large scale. We shall now deal with this proposition in more detail.

Continuous growth of aggregate money demand is one of the most important sources of growth in any economy. Actual real growth is always corrected by the potential to produce more (the supply constraint) and the inflationary pressure which itself could be interpreted as the result of the confrontation of demand and supply. But whatever the potential for physical growth, it might not be realised if adequate growth in money demand is lacking. If aggregate demand in money terms does not grow in a given year but there is a persistent underlying inflationary pressure in the economy, the result will most likely be not simply stagnation but rather a fall in physical output.

This result is illustrated by the following model simulation in which all components of nominal GDP for 2000 were fixed exactly at their 1999 levels and the system was asked to produce a "forecast" based on these very hypothetical assumptions. In answer was a repetition of the 1999 levels in nominal terms but an absolute decline in real terms by 9% in both GDP and industrial production and by 6.7% in household consumption. The explanation is that in this simulation activity in 2000 started with money supply which had risen in 1999 and was not consistent any more with that year's average demand. As a result, money supply was forced to shrink, inflation rates were reduced to 6.8% in CPI and to 9.9% in the GDP deflator. Inflation abatement was a satisfactory development but since price rises remained in absolute terms, they worked to cut stagnant money demand in real terms leading to a general economic recession.

It follows that once inflationary pressures remain at work, money demand has to increase every year faster than price rises in order to produce real economic growth. In order for this condition to be satisfied without special stimili from government fiscal or monetary policies there should exist a sufficiently strong growth inertia in all principal components of private money demand working together and supplementing each other. For instance, when we add to our initial inertia simulation a 10% growth in money demand for consumer goods and services, a 30% growth in nominal expenditure for capital investment and a

25% in the ruble value of exports (translated into a mere 5% rise in exports measured in dollars, then all these additional factors working together help translate into 6.1% growth in real GDP even though inflation rises to 32-36%. There is no growth in this scenario in government purchases or a reduction in tax rates. Growth is completely spontaneous.

But does such growth inertia in money demand exist in today's Russian economy and if it does, how does it work and what are its limitations?

To answer these questions we first studied trends in major components of aggregate demand in the course of 1997, 1998 and the first half of 1999. While all components of nominal GDP expanded strongly in the proceeding years their growth reflected the very high inflation of those years so that practically all those components shrank in real terms. Once inflation was reduced to more moderate levels, patterns in money demand changed and became more diverse. Regression analysis was done on monthly time series and the results translated into annual averages.

A relatively strong upward trend was found in nominal household consumption expenditures which, when projected into the future, produced a 54.2% rise in 1999 and a 34.8% rise in 2000. This roughly coincided with our basic projection for 1999 and even overshot our initial "hopeful optimist" scenario for 2000 supporting our other findings about consumption-led expansion in the Russian economy.

However, there is a definite turnaround downward series for nominal capital investment expenditure starting in 1998 and becoming even stronger in 1999. When projected further on this trend gave an absolute reduction in 2000 by as much as 26.5%. This finding seems to support our preliminary view as to rather dim prospects for this component of aggregate demand if radical improvements in the trend fail to occur.

Time series for government purchases indicate relatively weak growth. If this trend holds, our basic projections for 1999 and particularly 2000 look too optimistic. However, as stated above, prospects for government purchases, apart from political considerations, strongly depend on two underlying factors: the ability of the economy to produce government revenue and the choices as to the use of an emerging primary budgetary surplus.

A similar analysis was made for the average wage rate per employee. The trend here was definitely upward - by 27.9% in 1999 and 19.7% in 2000. However, growth in this variable is substantially slower than in household consumption

implying that there could be a strong barrier to future growth in that component of aggregate demand.

Let us discuss in more detail the mechanics of these different components as illustrated by the workings of the model.

Consumption and Wages

The upward inertia in nominal household consumption can be explained in two different ways: (1) producers of consumer goods proceed from their decisions to increase their sales on the basis of expected rise in their prices and provisions for possible increases in volume; (2) consumers determine their plans for buying consumer goods on their expectations of rises in disposable personal income and probable changes in prices. These two sides, or rather two big groups of economic actors represent respectively the forces of supply and demand in the market. The resulting equilibrium determines growth in prices and physical volumes of consumer goods produced and sold.

The model clearly shows what happens when producers start implementing their plans to raise their sales in any prospective period. Any exogenous addition to nominal supply, all other factors remaining unchanged, leads to an increase of only 36.2% in aggregate money demand for these goods and services. Additional money demand is automatically created when producers employ more labour to fulfil their plans for larger volumes of output. Assuming that unit labour costs per unit of gross output remain unchanged, the additional wage bill amounts to only 16.7% of the expected increase in sales but there is also a rise in other personal incomes equivalent to another 19.5% of the planned rise in sales.

Therefore, the inertia in the nominal supply of consumer goods and services per se will bring only a limited response in a rise in money demand and will not be enough to trigger the necessary growth in money demand. To implement producers' initial plans an additional increase in wages is essential. In the model this increase is performed by raising the average unit labour cost per unit gross output. This adds to the increment in the total wage bill needed to produce more goods and therefore also to consumer demand. But it does not necessarily lead to a rise in other incomes which are dependent on the difference between a rise in value added and that of labour income.

An increase in the wage bill helps sales of consumer goods by directly adding to total consumer demand. But it also eats into the remainder of total value added (GDP produced) reducing other incomes available for personal consumption and capital investment and reducing GDP produced as well. When price effects

are taken into account , GDP and its components in this inertia scenario show a net fall in real terms: household consumption by 3.9%, GDP by 7.6% and industrial production by 8.2%.

This is the net effect of the wage increase when and if the rise in nominal GDP is not supported by other components of aggregate demand, particularly government purchases, capital investment and exports, as well as by further reducing import dependence. A rise in wages could be beneficial if accompanied by policy measures which stimulate these other components of GDP

Role of Capital Investment

As mentioned above, gross domestic fixed investment has been relatively very low in all recent years. Current price statistics tend to overstate its share in GDP: between 1995 and 1999 it invariably hovers around 20-21%. This is equal to or higher than the share of capital investment in US GDP which is growing in real terms while Russian real GDP falls or stagnates. This makes the Russian figure look unreal. In fact, the price deflator for capital investment has been mostly rising faster than the deflator for GDP as a whole with the effect of raising its share in current prices while the opposite was true in real terms. In constant 1990 prices, the share of gross capital investment fell from 29% in 1990 to less than 10% in both 1995 and 1996. This downward trend continued in later years. Measured in 1995 prices, the share fell from 20% in 1995 to 17% in both 1997 and 1998.

More telling perhaps are data on net capital investment which is the difference between gross investment and capital consumption. This depends on the way capital consumption is measured, a rather controversial practice in Russian statistics. If official figures are to be believed, net investment has been **negative** starting with 1995 amounting to minus 5.5% of GDP in 1995, minus 8.8% in 1996 and minus 11.7% in 1998. When more modest and more realistic estimates of fixed capital consumption are used, net capital investment is still as low as minus 7% of GDP in 1999 and is projected at minus 7.2% in 2000. These are enormous figures for any economy, even one experiencing in deep recession. By comparison, at the trough of the US Great Depression net investment reached a record low of minus 7.7% to GDP in 1933.

Russian National Accounts show the clearly depressive way in which resources for financing capital investment are used. First, the overall capital investment figure (20-21% of GDP) includes capital repairs and has to be reduced down to 16.6-16.7% in order to single out capital fixed investment proper. Next, most of this is in construction, while investment in producer equipment adds is only 3.6-

4% (compared with 7.4-7.6% in the US). Second, when non-government investment is considered (80% of the total figure), only 15-17% of the depreciation was used for that purpose and between 20 and 40% of after tax profits. A sum equivalent to 15% of total net cash flow (depreciation and net profit) was also spent on financial investment. The use of the remaining half of the net cash flow is not officially disclosed in Russian statistics.

Our regression equations fitted for capital investment in current prices use depreciation and net profit as explanatory variables indicate that for the period 1990-1998 only half of the increments in depreciation allowances and 80% of increments in profit were used to finance fixed capital investment. These equations also fail to capture the turnaround in the inertia spending for capital investment that occurred in 1998 and 1999. When used to project fixed investment in 1999, the equation overshoots actual investment by 177 billion rubles, or 30.6%. The fact is that after the 1998 financial crisis businesses used an even smaller share of their profits and depreciation for capital investment.

An alternative way is to project capital investment in real terms and to then translate it into current prices by using the relevant price deflator. In this case, two additional explanatory factors were found to be significant which helped improve the predictive capacity of the investment functions. Real capital investment was found to be strongly dependent not only on the two major components of gross cash flow, but also on the rate of capacity utilisation in industry and the accumulated stock of fixed capital (with the expected minus sign).

According to these equations a change of one percentage point in capacity utilisation leads to a change (in the same direction) of 13.4 billion rubles in gross capital investment (in 1995 prices). For instance, the reduction of the utilisation rate from 60% of "normal" in 1997 to only 54 in 1998 took off 80.4 billion rubles of the estimated capital investment figure, a drop of more than 32.1%. By the same token the rise in capacity utilisation as the result of industrial recovery in 1999 by an estimated 5 percentage point should add 65 billion rubles to the investment total in 1998 (in 1995 prices) plus an additional few billion as a result in the further decrease in the stock of fixed capital. A further rise in real industrial output in 2000 could signal a turnaround in the recent downward inertia trend. Significant dependence on capital utilisation is particularly important since the change in that factor reflects shifting business expectations as to prospective real aggregate demand.

Profits and depreciation are large enough to finance a much larger real investment given the right incentives. **The principle incentive today is the**

expectation of rising output which is an indicator of a real need for larger and more modern production facilities and a sign of adequate returns to come. The financial wherewithal (in terms of cash flow) is there. But it is essential to provide a perspective for growing markets.

An increase in investment helps raise GDP both directly by adding to demand for capital goods, but also indirectly by increasing personal incomes and consumer expenditure. The total multiplier effect on aggregate domestic final demand is 1.6, but there is some leakage through increased imports, so that the overall GDP/investment multiplier is only 1.43.

Unfortunately, the model does not capture the positive effect of increased short- and medium-tern investment (usually via bank credits) into the replenishing working capital in the real sector. Because most Russian enterprises are short of working capital, they have difficulty increasing production even if money demand is available. There are no reliable statistical series to analyse these processes on a systematic basis.

The conclusion from this analysis that substantial growth in capital investment is both desirable and possible but that the principal incentive to higher investment is growing aggregate demand. If the consumer expenditure inertia is not sufficient to provide that stimulus, the only other domestic stimulus (apart from VAT reduction considered above) is an initial substantial rise in government purchases. We shall now consider this controversial subject.

Government purchases as a factor of growth

If the Russian government allays its monetarist fears, it could use government expenditure (and tax reduction) as instruments of stimulating a restart in sustained economic growth. The GDP/government purchases multiplier, as shown above, is larger than the investment multiplier. In other words, it is more effective in promoting aggregate demand, than direct stimuli to capital investment (particularly when production capacity is heavily under-utilised).

Table 1 presents the effects of two increases in government purchases (in current prices), one of 50 billion rubles (or 9.2%), another of 100 billion (18.4%) above our base scenario for 1999 and assuming that this change occurs in 2000. Also, in order to measure the net effect of such changes no provision is made for inertia growth in other GDP components.

Table 11 Effects of Increase in Government Purchases
(Compared to base inertia scenario for 2000 without separate provision for inertia growth in other GDP components. 1 - increase in government purchase by 50 bln. rubles; 2 - increase by 100 bln. rubles)

	1		2	
	bln ru	%	bln ru	%
GDP nominal	92.3	2.3	184.6	4.6
GDP real		1.1		2.1
GDP deflator		1.2		2.4
Household consumption	34.4	1.4	68.9	2.9
Same, real		0.7		1.3
CPI		0.7		1.6
Government consumption	50.0	9.2	100.0	18.4
Gross fixed investment	25.0	3.5	50.0	6.9
Government revenue	21.2		42.5	
Government primary surplus	- 28.8		- 57.5	
Primary surplus, % of GDP	0.76		0.06	
Overall budget deficit, % of GDP	- 1.7		- 2.4	
Change in M0	3.5		7.4	
Change in M2	13.5		27.3	

The stimulatory effect on aggregate demand and GDP is clear and substantial. Additional inflation is kept to a minimum, and this is enough to guarantee some real growth in 1999. The main question is why the inflationary effect is relatively small despite a substantial fall in the government primary surplus and an increase in the overall budget deficit.

First, total government revenue tends to increase when government purchases rise due to larger GDP and taxable incomes. While this increase is only slightly more than 42% than the rise in government expenditure, it does reduce the inflationary pressure by substantially cutting the need borrow and/or print new money.

But the model does not show a substantial increase in the monetary base (which is close to the increment in M0) compared to the inertia rise caused by the increasing demand for money. This is, of course, contingent on the assumption of no new major financial crisis and therefore, a return to the traditional households increase in bank deposits at the usual average 1.3% of personal income. Personal savings, as shown above, can oscillate wildly in times of crisis, and M0 is dependent on sudden inflows of dollar savings. But an inflationary surge in money supply occurs, it will be driven primarily by factors that have nothing to do with "printing money" as a result of a larger government deficit. That is because the large increase in household disposable income will be overwhelmingly spent for consumer goods or added to bank deposits leaving very little for additions to cash money stock in circulation.

The increase in M2 is larger due rising in business bank deposits. But if used to expand the base for credits to replenish the working capital in the real sector, this additional money could play a positive role in stimulating growth and containing inflation.

Because larger government purchases could lead to mounting budget deficits and higher inflationary pressure in the medium and long-term they **should only be used to jump-start a stagnant economy, not to keep it running at high speed**. The trick is to make it grow on its own account, without continuous stimulus from the government. If this condition is satisfied, growing government revenue should be adequate to finance a satisfactory supply of public goods. Therefore, if an initial push by the government leads to an endogenous spontaneous growth in later years, the budget will be balanced once a certain level of output is reached.

The initial "push" of government purchases should be adequate to help increase aggregate real demand in private consumption and investment and thus provide a real, rather than a nominal growth inertia in these components. It has to be large enough to be felt by the macroeconomy but modest enough not to create additional inflationary pressures. If real growth spreads from industries selling their goods and services directly to the government to all other industries through their interrelationship web, then growth in the economy may become spontaneous due to growth in real private incomes and the rising propensity to spend incomes and savings for productive purposes.

The model cannot answer the question of what exact amount of government stimuli is necessary to trigger spontaneous growth in investment and personal consumption. But it can show which levels of private aggregate demand are

sufficient to eliminate the budget deficit even if government expenditure grows substantially.

For instance, one of our previous scenarios assumed an increase of 18.4% in government purchases in 2000 leading to some government-led growth in consumption and investment. This led to a larger overall budget deficit because the spontaneous, non-government induced increase in private demand and incomes was absent. In different scenarios were a non-government induced increase in private demand was added exogenously growth in government revenue was more than adequate to compensate for larger government expenditure and to effectively eliminate the overall government deficit. There was a common pattern in each of these scenarios: total growth in household consumption and capital investment were at least 3 times as large as their government-induced increase.

If, for instance, the increase in government purchases in 2000 is 100 billion rubles (18.4%) then personal consumption should grow by 215 billion (9.0%) and capital investment by 135.2 billion rubles (41.1%) in order to raise an additional 132 billion rubles in government revenue. On the average, the increment in government revenue is equal to 31-32% of the increase in aggregate private demand. To compensate for a rise of 100 billion rubles in government purchases the total increment in aggregate private spending should be between 320 and 350 billion.

The main point of this scenario is that balanced budget point can be reached when government expenditure is increased, rather than reduced. This is possible if necessary stimuli are enacted to substantially increasing personal consumption and capital investment. In the scenario the principal lever of higher consumption (37.7% more than in 1999) is an increase in the wage bill which rises over the previous year by 50.4%. The steep rise in the wage bill is accounted for mainly by a 34.5% increase in nominal gross output of the economy supplemented by an 11.8% rise in unit labour costs. The rise in labour income looks too large, but actually it consumes only 28.3% of the total increment in value added leaving plenty of room for a leap in non-labour-incomes, including a 32% increase in gross cash flow. As expected, at least 55% of it would be spent on new capital investment which would rise by 41% in nominal terms, or about 10% in real terms.

Table 12 Comparing Growth Balanced-Budget Scenario (1) with Base ("Hopeful Optimist" Scenario (2) for 2000 (bln. rubles unless otherwise stated)

:	1	2	Difference
GDP nominal	5245.7	4943.5	302.2
GDP real growth (%)	2.1	3.0	- 0.9
GDP deflator (%)	28.4	20.0	7.0
Household consumption	3299.9	3085.0	214.9
Same, % of GDP	62.9	62.4	59.9*
Same, real growth (%)	9.4	3.0	6.2
CPI (%)	25.9	25.0	0.7
Wage bill	1450.8	1344.2	106.6
Government consumption	860.0	760.0	100.0
Same, % of GDP	16.4	15.4	13.6*
Gross fixed investment	1017.2	882.0	135.2
Same, % of GDP	19.3	17.8	18.0
Consolidated government revenue	1261.1	1129.2	131.9
Primary budget surplus	106.0	74.2	31.8
Same, % of GDP	2.0	1.5	0.5
Total budget surplus or deficit (% of GDP)	0.1	- 0.6	0.7
Money supply: M0	366.0	326.7	39.3
M2	862.9	784.0	78.9

* These figures are for 1999

It turns out that a strong impulse from government purchases, if judicially spent and coupled with rising private incomes (both labour and non-labour) could be the principal tool of leading Russia out of its stagnation trap and opening up the road to spontaneous growth. The other important point is that this growth is achieved by eliminating the budget deficit through higher government spending rather than by cutting it down and killing growth in the process. Eliminating the budget deficit in this way does not drive price inflation out of manageable bounds. Money supply does increase substantially, but largely in response to growing demand for money in circulation. The M2/GDP ratio (at 16.4% by the end of 2000) is exactly the same as at the end of 1999. There is no need to print extra money since government revenues are sufficient to cover both current government expenditure and pay interest on accumulated debt.

Table 13 compares the two balanced-budget points — the lower point at real GDP at 1,5% below the base scenario and achieved by cutting government expenditure, with the higher point — at real growth of 2.1% in GDP and 3.8% in industrial production above base. These two points are also different in macroeconomic structure.

Table 13 Comparing structure of balanced-budget points

	lower point	higher point
Capacity utilisation (% of "usual")	49	60
Personal consumption (as % of GDP)	60.7	62.9
Government purchases (as % of GDP)	12.2	16.4
Capital investment (as % of GDP)	17.7	19.3
Govt revenue (as % of GDP)	23.5	24.0
Net exports (as % of GDP)	9.4	3.7

The two alternative balanced-budget points indicate the two opposite routes for the economy to travel — one towards continued stagnation without prospects for revival, and the other towards market normalcy and sustained growth.

The second alternative is also revealing in that a balanced budget occurs when the capacity utilisation rate reaches only 60% of normal. There is still perhaps 20 percentage points up to go before the "Eisner full employment" point is reached. That is the theoretical maximum balanced-budget point, as Robert Eisner showed. A further movement up in the Russian economy, given the current tax structure, would lead to larger budget surpluses which would work against growth rather than stimulate it. The meaning of this finding is that the present tax structure and level of taxation in Russia are excessively restricted and biased in favour of stagnation. Taxes should be **lowered, not raised** in order to help growth. The VAT reduction scenario discussed above is one of the necessary reforms needed at this time to bring about a beginning of spontaneous growth.

Conclusions

After many years of depression and stagnation, the Russian economy finds itself locked in a no-growth trap created by two institutionalised structural and behavioural patterns:

(1) the large gap between excessive depreciation and profits, on the one hand, and the narrow domestic market constrained by the abnormally low incomes of the population, on the other;

(2) an abnormally high inflationary pressure in an economy where aggregate demand is well below productive capacity.

There are two ways out of the trap:

(i) to channel depreciation and profits into capital investment and reconstructing the domestic machine-building industry by centralised means of government intervention and management;

(ii) to steadily increase aggregate demand in the economy while containing inflation by predominantly market-oriented macroeconomic policies.

This chapter explores the second alternative by using econometric model calculations to test various hypotheses.

The principal finding as to the economic recovery in 1999 is that it was largely based on the fourfold devaluation of the ruble which drastically changed the price-exchange rate relationship making import substitution and some export expansion the main factors of rising industrial production. By stabilising the ruble exchange rate at a low level the Russian authorities managed to reduce inflation and this help in reversing the trend in falling real aggregate demand.

However, while some additional import substitution and export expansion might be possible in 2000 and beyond, re-starting sustained economic growth depends mainly on increasing prospective domestic aggregate demand. The present outlook in that respect is not encouraging since there is little if any spontaneous growth inertia in the main components of final demand and income.

Different model scenarios for 2000 show that real growth is possible only if macroeconomic policies refute the restrictive approaches of the past and turn to active stimulation of aggregate demand by increasing government purchases and reducing taxes, particularly the VAT which has the important effect of stimulating consumer demand while reducing inflationary pressures.

While this drastic change in the approach to fiscal policy determination is essential, it will not produce spontaneous economic growth if private non-government induced aggregate demand does not grow faster than private demand induced by fiscal policies through their respective multipliers.

For one, only spontaneous growth in private domestic demand allows the overall budget deficit to be completely eliminated while pursuing substantial rises in government expenditure and reduction in taxes. Deficit elimination would further reduce inflationary pressures but would also create a solid financial foundation for further escalating active fiscal policies. For another, a

budgetary surplus would also work towards loosening overall credit, particularly in order to reduce shortages in working capital.

But spontaneous growth in private demand is only possible if an income policy is pursued which, on the one hand, stimulates strong growth in labour incomes, and, on the other hand, permits substantial growth in profits. Increasing wages in a stagnant economy tends to kill prospects for a revival of capital investment. When wage bill increases become the natural consequence of rising production, they tend to help increase demand for consumer goods while also leaving room for rise in profitability and higher capital investment. A balanced incomes policy is therefore an essential element of macroeconomic policies intended to help re-start spontaneous economic growth. Such a policy would also help attract wide support from all classes of society making it a consensus policy.

The low capital investment level in Russia has many reasons, the principal one of them being the **low expected rate of return** caused by pessimistic output growth expectations, i.e. by inadequate aggregate demand. Our model shows that capital investment is very much susceptive to changes in market expectations. To stimulate capital investment the most important thing is to raise aggregate demand and output. Investment will follow at an accelerating rate.

It is particularly important to note that a government fiscal policy that is aimed at reducing government expenditure or raising taxes in order to balance the budget is counter-productive in current economic circumstances since it could stop recovery and perpetuate stagnation. But a balanced budget can also be reached by increasing government expenditure, reducing taxes and promoting spontaneous growth. Our calculations indicate that the current tax structure is too restrictive and will not support a full employment level of economic activity. A need for a less restrictive tax system is obvious, and the general course towards tax rate reduction taken by the government and the Duma is correct. It would also be instructive to calculate tax rate levels that are consistent, say, with a 80% capacity utilisation rate in the economy which can only be achieved if real GDP rises by 50-60% above its current level. But that is a task for further research.

The more immediate task is to assess the effect of reducing some taxes today, particularly VAT. The effect of this reduction on economic growth is to be felt in two ways: (1) through a substantial addition to the purchasing power of the consumers, and (2) through the increase in profit margins. When both these effects are brought together, they are translated into higher output, sales and capital investment. The immediate rise in the share of personal consumption

without reducing the share of profits and capital investment is one step forward toward market "normalcy" and self-sustained market-induced growth. It is also a promising policy scenario since it avoids the zero-sum game dilemma involved when one-sided and unbalanced income policies are used.

References

Abalkin, L. and Stroyev, Ye. (ed.) The Role of the State in the Creation and Regulation of the Market Economy (in Russian). Federation Council Publication, 1998.

Economic Report of the President Together with the Annual Report of the Council of Economic Advisors. GPO, Washington, D.C., 1998.

From Plan to Market. World Development Report 1996. Published for the World Bank by Oxford University Press. Washington, D.C., 1996.

Input-Output Tables of the Russian Economy, 1990, 1992, 1993 and 1995 (in Russian). Provided by the Institute for Mathematical-Economic Research, Ministry of the Economy, Russian Federation.

Menshikov, S. Catastrophe or Catharsis? Inter-Verso, 1991.

Menshikov, S. The Role of State Enterprises in the Transition from Command to Market Economies, in *Evolutionary Economics, 1994-4.*

Menshikov, S. The "Checklist" is Correct, in *Transition, World Bank Newsletter, November-December 1995.*

Menshikov, S. Russian Economy: Practical and Theoretical Issues of Market Transformation (in Russian). Mezhdunarodnyie Otnosheniya, 1996.

Menshikov, S. The Virtual Economy and Reality, in *Transition, World Bank Newsletter, November-December 1998.*

Menshikov S. New Economics. Foundations of Economic Knowledge (in Russian). Mezhdunarodnyie Otnosheniya, 1999.

Menshikov S. Views on Reforms and Regulating the Economy (in Russian). In *Voprosy Ekonomiki, 6, 1997.*

Menshikov S. Scenarios of the Development of the Military-Industrial Complex (in Russian). In *Voprosy Ekonomiki, 7, 1999.*

Menshikov, S. Russian Capitalism Today. In *Monthly Review, 51, 3 (July-August 1999.*

Review of Economic Policy in Russia in 1998 (in Russian). Bureau of Economic Analysis, Moscow, 1999.

Russian Economic Trends. Russian European Centre for Economic Policy in Co-operation with Working Centre for Economic Reform, Government of the Russian Federation. Quarterly. Vol. 2-8, 1993-1999.

Russian Economic Trends. Russian European Centre for Economic Policy in Co-operation with Working Centre for Economic Reform, Government of the Russian Federation. Monthly Update, 1994-1999.

Russian Statistical Yearbook (in Russian). Goskomstat, 1997 and 1998.

System of National Accounts (in Russian). Goskomstat, 1997.

DEVELOPMENT RESEARCH SERIES

WORKING PAPERS:

No. 1: *Olav Jull Sørensen*: Marketing Issues in Peasant Agricultural Development, 55pp, 1983.

No. 2: *Hans Gullestrup*: The Ecol-Humanistic Technology - the new Technology as Experiences from the Past, 33pp, 1983.

No. 3: *Georg Sørensen*: Transnationals and the Transfer of Technology to the Third World, 31pp, 1984.

No. 4: *Georg Sørensen*: International Bureaucracies and Aid: The Political Economic of the 'B-Share', 11pp, 1984.

No. 5: *Georg Sørensen*: Notes on Materialism and Boredom - Western Development Ideals, 12pp, 1984.

No. 6: *Olav Jull Sørensen*: Marketing Systems and Economic Development. An Institutio-nal-Structural Approach, 41pp, 1984.

No. 7: *Georg Sørensen*: How much Poison is Another Man's Meat? - Notes on the Logic of World Systems Analysis, 29pp, 1984.

No. 8: *Georg Sørensen*: Peace and Development: Looking for the Right Track, 18pp, 1984.

No. 9: *Georg Sørensen*: The Twists and Turns of Development Theory - A Comment on "The European Experience" by Dieter Senghaas. 19pp, 1984.

No. 10: *Jacques Hersh & Ellen Brun*: Aspects of Soviet Participation in a Shifting World Economy. 45pp, 1984.

No. 11: *Olav Jull Sørensen*: Marketing System Development and Labour Migration: Analysis and Consequences. 41pp, 1984.

No. 12: *Georg Sørensen*: How Cold is the Second Cold War? - An Assessment of the Scope of 'the Great Contest'. 23pp, 1984.

No. 13: *John E. Kuada*: Agricultural Development in the Third World. 23pp, 1984.

No. 14: *Olav Jull Sørensen*: Profiles of Tanzanian Peasants and their Marketing Implications. 52pp, 1984.

No. 15: *Jørgen Kristiansen*: Urban Passenger Transport in Developing Countries - Socio-economic Impact and the Choice of Technology. 58pp, 1985.

No. 16: *John E. Kuada*: Marketing Systems in a Development Process. 35pp, 1985.

No. 17: *Georg Sørensen*: Some Contradictions in a Rich Concept on Development. 14pp, 1985.

No. 18: *Olav Jull Sørensen*: Marketing of Agricultural Inputs/Implements and Profiles of Farmers in Kenya: Project Preparations. 47pp, 1986.

No. 19: *Georg Sørensen*: Development Through the Eyes of a Child. 17pp, 1986.

No. 20: *Georg Sørensen*: International and External Intertwined: 5 Obstacles to Development in India. 20pp, 1986.

No. 21: *John E. Kuada*: Macro-Micro Integrated Framework for Market Opportunity Analysis and Project Selection. 14pp, 1986.

No. 22: *Olav Jull Sørensen*: Co-operatives: Movement-to-Movement Cooperation. Some Conceptual Views. 15pp, 1986.

No. 23: *John E. Kuada*: Financing Rural Food Marketing Systems in Ghana. 16pp, 1986.

No. 24: *Hans Gullestrup*: Culture, Cultural Analysis and Cultural Ethics - Or What Divides and What Unites Us? (Out of print) (in Danish). 84pp, 1987.

No. 24a: *Hans Gullestrup*: Culture, Cultural Analysis and Cultural Ethics - Or What Divides and What Unites Us? (Second revised edition) (Out of print) (in Danish). 92pp, 1988.

No. 25: *John E. Kuada*: Food Marketing in Ghana, the Role of Rural Food Traders. 53pp, 1988.

No. 26: *Henrik A. Nielsen*: Monitoring Rural Development in Bangladesh. 22pp, 1989.

No. 27: *Hans Gullestrup*: The Ethical Dilemma in *the* Intercultural Co-operation, or: The Development Aid Worker's Personal Problem (in Danish). 26 pp, 1991.

No. 28: *Chaiwoot Chaipan*: Current Issues on Economic Development in East and Southeast Asia. 24pp, 1991.

No. 29: *Henrik Nielsen:* Databased Information on Danida-Projects 1962-91: Overview and Analysis of the Daniproj-Database. 55pp, 1992.

No. 30: *Hans Gullestrup*: Evaluating Social Consequences of Social Changes in the Third World Countries. 24pp, 1993.

No. 31: *Johannes Dragsbaek Schmidt*: In The Shadow of the Pacific Century - Comparative Perspectives on Externalities Influence on Economic Policy-Making in Southeast Asian Would-be NICs. 106pp, 1993.

No. 32: *Henrik A. Nielsen:* Local Community Development Around the Bay of Bengal: Context, Crises and Perspectives. 27pp, 1994.

No. 33: *Johannes Dragsbaek Schmidt:* Southeast Asian State Responses to a Regionalized World Economy. 21pp, 1994.

No. 34: *Johannes Dragsbaek Schmidt:* Semi-autonomy in Economic Policy-making: The Case of Thailand. 28pp, 1994.

No. 35: *Johannes Dragsbaek Schmidt:* Increasing Exports in a Decreasing World Market: The Role of Developmental States in the ASEAN-4. 27pp, 1994.

No. 36: *Johannes Dragsbaek Schmidt:* State Capacities and Bargaining Strategies in the Global Disorder. 14pp, 1994.

No. 37: *Samir Amin:* The Future of Global Polarization. 17pp, 1994.

No. 38: *Peter W. Cunningham:* The Re-affirmation of State Socialism. The South African Debate. 17pp, 1995.

No. 39: *Andre Gunder Frank:* Nothing New in the East: No New World Order. 28pp, 1994.

No. 40: *Johannes Dragsbaek Schmidt:* State Intervention in Southeast Asia. Creating Growth without Welfare. 20pp, 1994.

No. 41: *Garry Rodan:* Ideological Convergences Across 'East' and 'West': The New Conservative Offensive. 24pp, 1995.

No. 42: *Jacques Hersh:* North Korea: Ideal-Type Anomaly. 18pp, 1995.

No. 43: *Research Centre for Development and International Relations (DIR), Johannes Dragsbaek Schmidt et al. (eds.)*: Research Program 1995-1997. Globalization and Social Change - Structures, Systems and Unidisciplinary Research. 74pp, 1995.

No. 44: *Feiwel Kupferberg:* Ethno-nationalism, Liberal Democracy and the Psychology of the Post Cold War Era. 19pp, 1995.

No. 45: *Feiwel Kupferberg:* Uncertainty, Chaos and Learning: Prolegomenon to a Sociology of Creativity. 27pp, 1995.

No. 46: *Feiwel Kupferberg:* Strategic Learning: East Germany as a "Model Case" for Transformation Theory. 26pp, 1995.

No. 47: *Li Xing*: China and East Asia vs. The West: Controversies, Clashes and Challenges. 19pp, 1995.

No. 48: *Kwang-Yeong Shin:* Democratization and Class Politics in Korea, 1987 - 1993. 20pp, 1995.

No. 49: *Joachim Hirsch:* Regulation Theory and its Applicability to Studies on Globalization and Social Change. 12pp, 1995.

No. 50: *Ellen Brun:* The New Social Contract: Sustainability from below. 20pp, 1995.

No. 51: *Li Xing:* The Dynamics of East Asian Intra-Regional Economic Relations. 22pp, 1995.

No. 52: *Kwang-Yeong Shin:* Characteristics of the East Asian Economic System: Authoritarian Capitalism and The Developmental State. 33pp, 1996.

No. 53: *Li Xing:* Playing Democracy and Human Rights. The International System and the China-West Case. 17pp, 1996.

No. 54: *Jacques Hersh & Johannes Dragsbaek Schmidt:* Dirigisme or Laissez-Faire? - Catching-up Strategies in the Global System After the Demise of Soviet-Style Command Economies. 22pp, 1996.

No. 55: *Johannes Dragsbaek Schmidt & Jacques Hersh:* Peace Convergence and Political Legitimacy in Israel and Palestine. 16pp, 1997.

No. 56: *David Harvey:* Globalization in Question. 22pp, 1997.

No. 57: *Amiya Kumar Bagchi:* In Praise of the Developmental State. 35pp, 1997.

No. 58: *Su-Hoon Lee:* The Rise of Environmentalism in South Korea. 31pp, 1997.

No. 59: *Mark Beeson & Kanishka Jayasuriya:* The Politics of Regionalism: APEC and the EU in Comparative Perspective. 37pp, 1997.

No. 60: *Manfred Bienefeld:* The State and Civil Society: The Political Economy of the "New Social Policy". 35pp, 1997.

No. 61: *Duncan McCargo:* Problematising Democratisation: The Thai Case. 22pp, 1997.

No. 62: *Li Xing:* Conceptualizing the Crisis of Socialism: A Gramscian Approach. Some Reflections on the Chinese Socialist Experience. 41 pp, 1998.

No. 63: *Henrik A. Nielsen*: Decentralising the Monitoring of Development Intervention: From Local Government Impact-Monitoring. 116pp, 1998.

No. 64: *Suresh Narayanan*: From Miracle to Realities: The Malaysian Economy in Crisis. 26 pp, 1998.

No. 65: *Li Xing, Jacques Hersh & Johannes Dragsbaek Schmidt*: The Rise and Fall of East Asian Capitalism: Back to the future? 30 pp, 1998.

No. 66: *Jan Oberg*: Globalization and Responses by Civil Society to Humanitarian Emergencies. 44 pp, 1998.

No. 67: *Johannes Dragsbaek Schmidt*: Development Theory and the Crisis of the State. 30 pp, 1998.

No. 68: *Johannes Dragsbaek Schmidt, Jacques Hersh and Li Xing (eds.) and members of DIR*: Research Program 1998-2000 Globalization and Social Change Interdisciplinary Critical Perspectives. 81 pp, 1998.

No. 69: *Katarina Tomaševski:* Human Rights in International Development Co-operation: Between Politics and Policy. 69 pp, 1999.

No. 70: *Mammo Muchie:* Problems of Sub-Saharan Africa's Renewal in the Era of Globalisation. 32 pp, 1999.

No. 71: *Wolfgang Sachs:* Globalization and Sustainability. 38 pp, 1999.

No. 72: *Xing Li:* The Market Approach to Industrialization: A Critique of China´s Experiment. 37 pp, 1999.

No. 73: *Bob Jessop*: The State and the Contradictions of the Knowledge-Driven Economy. 37 pp, 1999.

No. 74: *Bob Jessop*: What follows Fordism? On the Periodization of Capitalism and its Regulation. 36 pp, 1999.

No. 75: *Mammo Muchie*: Climbing the Value-Added Chain in Leather Manufacture: Lessons from the Indian Case to Enhance Value-Added Leather Processing in Ethiopia and Kenya. 26pp, 2000.

No. 76: *Stanislav Menshikov*: Macropolicies to Help Re-Start Economic Growth in Russia. 44 pp, 2000.